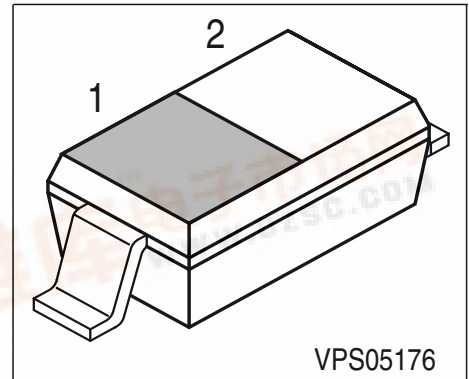




BAT 60A

Silicon Schottky Diode

- High current rectifier Schottky diode with extreme low V_F drop
- For power supply
- For clamping and protection in low voltage applications
- For detection and step-up-conversion



ESD: Electrostatic discharge sensitive device, observe handling precaution!

Type	Marking	Pin Configuration		Package
BAT 60A	white/3	1 = C	2 = A	SOD-323

Maximum Ratings

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	10	V
Forward current	I_F	3	A
Surge forward current ($t < 10\text{ms}$)	I_{FSM}	5	
Total power dissipation, $T_S = 28^\circ\text{C}$	P_{tot}	1350	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	55 ... 150	

Thermal Resistance

Junction - ambient ¹⁾	R_{thJA}	≤ 160	K/W
Junction - soldering point	R_{thJS}	≤ 90	

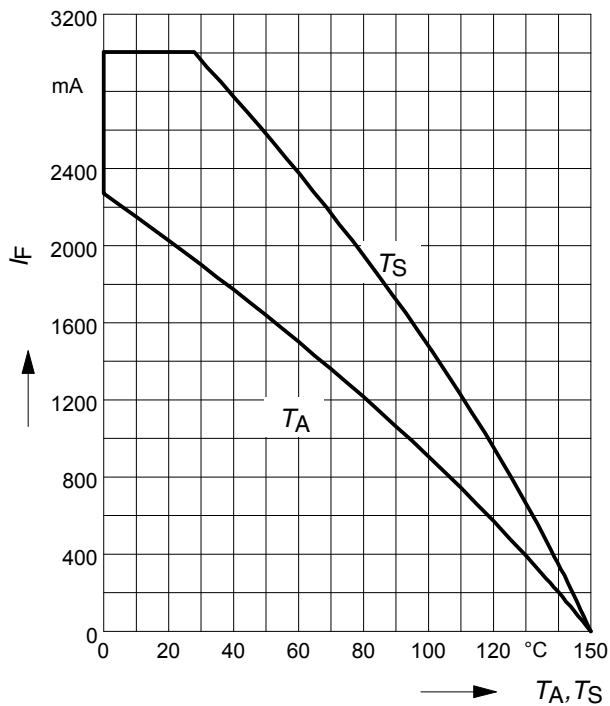
1) Package mounted on epoxy pcb 40mm x 40mm x 1.5mm / 0.5cm² Cu

Electrical Characteristics at $T_A = 25\text{ °C}$, unless otherwise specified.

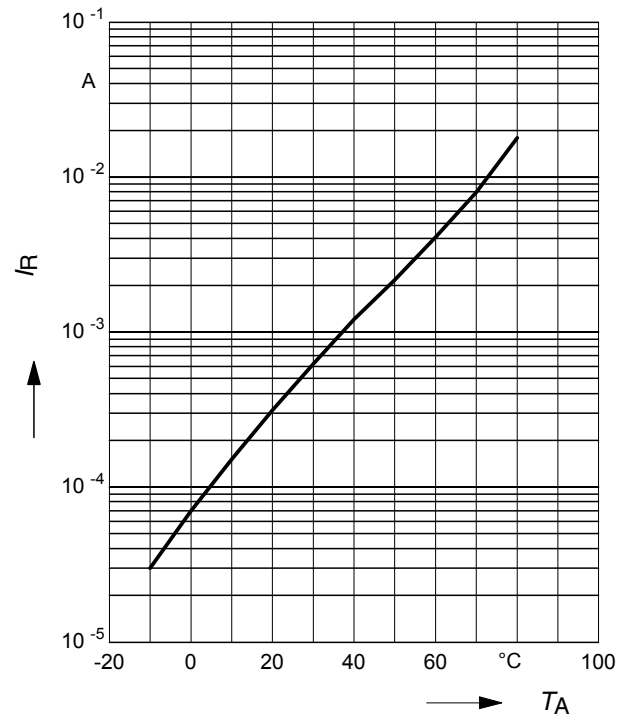
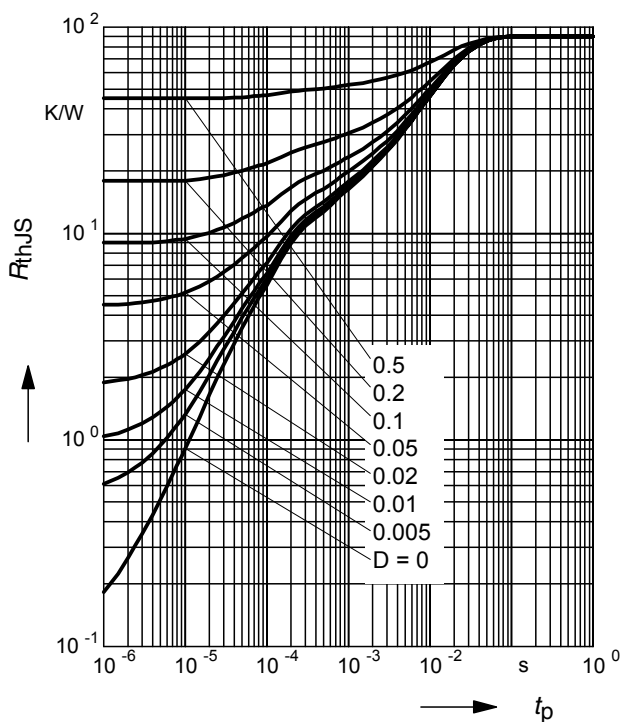
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current $V_R = 5\text{ V}$ $V_R = 8\text{ V}$	I_R	- -	0.3 0.6	- 2.6	mA
Reverse current $V_R = 8\text{ V}, T_A = 80\text{ }^{\circ}\text{C}$	I_R	-	18	-	
Forward voltage $I_F = 10\text{ mA}$ $I_F = 100\text{ mA}$ $I_F = 1000\text{ mA}$	V_F	0.1 - -	0.12 0.2 0.3	0.15 - -	V
AC characteristics					
Diode capacitance $V_R = 5\text{ V}, f = 1\text{ MHz}$	C_T	-	20	-	pF

Forward current $I_F = f(T_A^*; T_S)$

* Package mounted on epoxy


Reverse current $I_R = f(T_A)$

$V_R = 8V$


Permissible Pulse Load $R_{thJS} = f(t_p)$

Permissible Pulse Load

$I_{Fmax} / I_{FDC} = f(t_p)$

